

Looking toward Lake Michigan from the side of a large dune. Note the pine trees, the shrubs, and the flowers in the foreground.

## The Fairyland of the Middle West

## Sand Dunes of the Indiana Shore: a Magic Country Where Hills Come and Go at the Caprice of a Gale

THE sand-dune country of Northern Indiana, extending from Gary to the Michigan state line, is known to people the world over. It is a natural wonderland attractive alike to scientist and layman, to him who understands its secrets as well as to him who is ignorant of its meaning but captivated by its spell. There is no natural park like it in this country or any other. It is unique.

In the first place, the dune region is an uninhabited wilderness. That there is such a spot within a few miles of the center of our population and almost at the very doors of Chicago is itself worthy of note. Yet, while it is a wilderness, it is not a desert.

Moreover, the dunes are a different world from the monotonous flatness of the prairies of Illinois. They are a country of hills and bluffs, gullies and valleys, with all sorts of variations—little lakes, bogs, small streams and meadows. The beach is probably the finest along inland waters anywhere—broad, smooth, clean, free from rocks and quicksands, and sloping gradually into the coolness of Lake Michigan.

To the average visitor the spectacle of the so-called "walking dunes" is the most interesting. Here he sees land in the making. Here today is a towering dune crowned with flowers and other vegetation; tomorrow it is gone, and in its place is a great "blow-out" or saucer-shaped excavation of glistening sand-a silent testimonial of the might of the winds. Today is a deep gash in a bluff; tomorrow its place is taken by a lofty heap of white sand that has come up, grain by grain, out of the lake. Today stands a small forest on the edge of a great shallow pond; tomorrow it is a cemetery, with even the tree tops covered by sand marching in from the beach. Today one sees a glistening mountain; tomorrow it is no more, and its former presence is revealed only by gray, somber tree trunks perfectly preserved but denuded of all bark.

Not all the dunes, however, fall prey to the caprices of the winds. Those which are covered with sufficient vegetation are stationary, being able to withstand the onslaughts of the gusts, which quite often attain a velocity of sixty miles or more an hour. The cottonwood tree is the best sand binder because of its extensive root system, though other trees and shrubs fulfill this kindly mission also. In this connection the wild grapevine must not be omitted; valiantly does it strive to hold together whole hills of fickle sand.

Volumes might be written about the trees of this marvelous region. Both because of their variety and their extraordinary appearance are they worthy of comment. The prevailing type of tree of the northern or windward slope is the pine, of which there are several kinds; while the leeward sides boast principally the oak, the black oak being the most conspicuous on the older dunes. Most of the trees are deciduous, but there is at least one cone-bearer—the tamarack. Here also one can find junipers, alders, cottonwoods, poplars, sour gums, red maples, pawpaws, and willows. One need not be a member of scientific societies to appreciate their indescribable beauty and charm.

Not only the botanist but every other lover of flowers as well will find the dunes a floral paradise, a place

## By J. S. MORRISON

where he or she can satisfy the heart's desire in this particular. The visitor will find acres upon acres and miles upon miles of rare and common plants, flowers, and shrubs. Their great diversity of colors will dazzle the eye; their combined fragrance will be the open-sesame to the unlocked memories of childhood's brightest hours.

Among the swamps you will see the yellow of goldenrod contrasted with the purple of asters. You will find violets, several varieties of orchids and pitcher plants. Cinnamon ferns several feet high will not escape you. Here also the blending of browns and greens of cat-tails, sedges, reeds and ferns will give you rest. Farther up, on the hills of sand, grows the wild lupine or wild pea, which, blooming profusely in May and June, enchants the beholder with its beauty of striking purple. Another plant of the same entrancing color is the Japanese iris. Once seen, it will never fade from the mind's eye.

Dune grasses of many species have been noted, which resist with success the heat of summer and the rigors of unusually severe winters. One observer places their number at more than thirty. Among them the wild rye is very much in evidence, attaining, as it often does, a height of eight or ten feet.

If the lover of birds will visit the dunes he will not be disappointed. It has been stated by an accurate observer that more than three hundred varieties of feathered folk visit here during the year. It is believed that nowhere else, during the period of migration, are there more varieties to be found. Formerly great havoc was done the edible game fowl by lawbreaking hunters, but it is hoped that the present penalties are sufficiently drastic to prevent the repetition of such wanton acts. Furthermore, the passage of the Federal Migratory Bird Act and its subsequent approval by the United States Supreme Court will undoubtedly have here a beneficial effect.

Lake Michigan itself, in whatever mood it may be, awakens fancies in the beholder. Hundreds of persons make excursions to this wonderland who are recreated and revived by the charm of the saucy whitecaps of the waves or by the blue-green smoothness of the surface, which begets the peace that passes all understanding. And if one cares to bathe in the refreshing waters he will discover that Nature could have built no finer beach if made to order.

The Indiana sand dunes are a Mecca for geologists. For a period estimated as five thousand years Lake Michigan has been taking material from its west shore, from Chicago northward into Wisconsin, and depositing it at the dunes. Previous thereto the level of the lake was fifty or sixty feet higher than now, and the discharge was toward the Mississippi at a point not far from the present site of the dunes. During this span of time, geologists tell us, about five hundred square miles of land were, in this manner, washed away and

deposited—an unparalleled erosion. The student of geology also will be able to see here the action of wind and water upon the soil; to observe the selecting and rearranging processes which control the evolution of the earth's crust, and which, usually consuming ages, here work swiftly almost before the eye.

While the dunes are the source of greatest pleasure and profit during the spring and summer, it must not be supposed that they are forbidding in the autumn or winter months. In fact, the autumn affords perhaps the best opportunity for enjoying the flora of the region. For then the shrubs and trees are gowned in their most gorgeous costumes; then one sees matchless variations of all the colors of the spectrum. And, later on, the snows of winter cause one to imagine that he is in the picturesque hill country of some of the New England States.

What is the present status of this veritable fairyland so far as concerns its ownership? Virtually the entire strip, approximately twenty miles in length and from one to one and one-half miles in width, is owned by private persons. As long as this situation continues this marvelous playground is in grave danger of being lost to the public, to whom it would unquestionably be a blessing. The first agitation for public acquisition of the dunes occurred in 1915, those initial efforts crystallizing in the organization of the National Dunes Park Association, whose purpose was declared to be "to secure, establish, improve, and perpetuate a public national park or parks along the southerly shore of Lake Michigan in the state of Indiana." About that time the United States Senate adopted a resolution directing the Secretary of the Interior to investigate and report to Congress the advisability and cost of securing the sand-dune district for park purposes. Public hearings were held in the city of Chicago in 1916 before Stephen T. Mather, Director of National Park Service, who made a favorable report to his chief. While nothing more has been done by Congress, the project is still very much alive, being fostered by the aforementioned association, by the Indiana Federation of Women's Clubs, and by the public-spirited men and women throughout the Middle West. The people of Indiana have lately come to the front, and have determined to fortify their wishes by having the state acquire Duneland and maintain it as a state park until the Federal Government sees its way clear to take it over.

It is to be hoped that those men and women who believe in public parks and their salutary effects upon lives too often and too thoroughly tainted by the grime and soot and heavy labor of this commercialistic age will manifest a keen interest in a region that is incomparable for its natural beauty. The dunes cannot be duplicated; the works of man can be. To the geologist the dunes are unique; to the naturalist they are a wonderful field of study; to the artist and poet they are an inspiration; to the rank and file of us they are a fountainhead of perpetual wonderment and joy. To fail to preserve them for the benefit of this and future generations will be nothing less than a national calamity.